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Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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MAY 1989

SUMMARY

Total deliveries jumped 4.7 percent in May, the largest year-to-year increase in several months. Though half of the roughly 750 thousand B/D increase was accounted for by residual fuel oil, the rise for the remaining products, at 2.5 percent, was still larger than has been the case since late last year. For residual fuel oil, most of the 40 percent increase was due to unusually low deliveries a year ago. However, residual fuel oil deliveries this May were still reasonably strong.

Despite the above-average increase in domestic deliveries for May, the underlying pattern of consumption growth appears to have been altered by a marked flattening of jet traffic, some moderation in overall economic growth, and recent higher petroleum prices. Excluding residual fuel oil's recent gains, we now estimate consumption growth at about 2 percent. Including residual fuel oil—whose deliveries and consumption patterns tend to be more volatile than for other major products because of fuel switching capabilities—we estimate that recent consumption growth has been slightly higher.

Over the past seven months, in a reversal of the pattern of previous years, Alaskan production has been contributing to, rather than offsetting, the production decline elsewhere in the U.S. Even after accounting for temporary disruptions arising from the Valdez tanker accident, which cut Alaskan production for a short period earlier this year, year-to-year declines in Alaska have been running 40 to 50 thousand B/D. By far the largest portion of the U.S. crude oil production decline, however, continues to be in the lower 48. Since early 1986, production outside Alaska has fallen by about 1.4 million B/D or nearly 20 percent.

Rising consumption and declining domestic production helped to keep May's imports near the previous month's recent-year high of 8.0 million B/D. Year to year, May's imports rose 9 percent, or 650 thousand B/D, to 7.8 million B/D. During the month, utilization of refinery capacity in actual operation exceeded 91 percent, not far short of peak levels of around 93 percent experienced last summer.

PRODUCT SUPPLIED [1/]

Gasoline

MAY'S RISE BRINGS YEAR-TO-DATE GROWTH TO 1.4 PERCENT.

Recent economic data suggest that although the economy continues to expand, its growth is moderating. This, combined with higher gasoline prices in the past two months, would be expected to have had some dampening effect on gasoline demand. Although this may be the case, it has not been evident in deliveries data of the past month or two.

May's deliveries rose 2.0 percent, year to year, in the range of the 1.5 to 2 percent growth rate for gasoline consumption we had previously been estimating. This follows April's results, which, once adjusted for holiday effects, also showed an increase within that range. Combined with first quarter results boosted by the Department of Energy's recently-released March data, this brings the average deliveries increase for the first five months to 1.4 percent compared with monthly data for 1988.

Data on miles traveled, as well, though available only through the first quarter, have so far provided only a slight hint, at best, of a slowdown in gasoline demand. Though it is true that travel growth in the first quarter as a whole, at about 4 percent, was actually higher than last year's average 3.5 percent rate, this was because of a jump in January of over 6 percent. Even so, January's unusually large increase was only partly offset by a much weaker rise for February, and travel in March was estimated to be up 3.3 percent—only slightly below last year's average rate. Data for more recent months, when they become available, may give a clearer indication of recent gasoline consumption trends.

Unleaded now accounts for more than 87 percent of gasoline deliveries. Its year-to-year gain in share has averaged more than

API ESTIMATES

	MAY		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.9	4.7	17.3	2.1
Crude production[2/]	7.8	(4.4)	7.8	(5.4)
Total imports[3/]	7.8	9.0	7.8	12.5
Stocks (million bbl)[3/]	1,041	(2.1)	na	na

6 percentage points so far this year, continuing the slightly greater pace of the previous two years related to the gradual, region-by-region introduction of midgrade unleaded by various suppliers.

Unleaded premium has continued to grow more rapidly, proportionately, than unleaded as a whole. It has been gaining market share at a rate of 2 to 3 percentage points annually over the past several years and now accounts for more than 25 percent of the market. Although the penetration of midgrade unleaded has been under way for several years, its share is still relatively small, as introductions have been on a market-by-market, supplier-by-supplier basis. Additional information on this market segment is expected to be available soon; the Department of Energy has been collecting midgrade data since January and is expected to begin publishing this data next month.

Distillates

SOME SLOWING IN DEMAND MAY BE TAKING PLACE.

Distillate deliveries, after declining year-to-year for the first quarter and rising in April only because of below-trend deliveries a year ago, rose 1.5 percent in May. Though this still appears to be less than the growth in consumption, that growth rate, based on current economic trends, is likely only holding its own or slipping slightly.

The moderating economy suggests that on-highway usage, along with industrial consumption, may be growing a little less rapidly than before. Industrial output, for example, though still showing year-to-year gains of about 4 percent most recently, has moderated somewhat from the 5 percent gains of late last year. Data on shipments, however, have as yet shown little if any slackening.

Rail traffic increases continue to be only slight, with growth in ton-miles currently running at only about 1 percent; what growth there is in this sector is largely due to increased shipments of coal, and to a lesser extent, chemical products. Small gains in distillate volume from increased farm acreage this year are also likely. Overall, growth in distillate consumption is estimated to be near 2.5 percent.

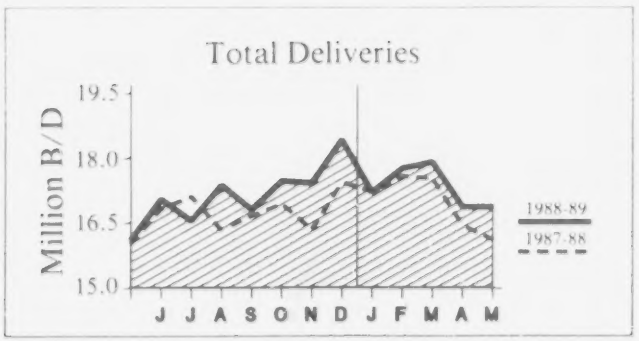
Residual Fuel Oil

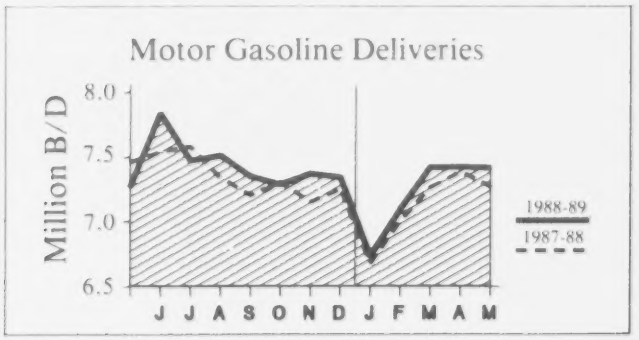
LOW DELIVERIES LAST MAY EXAGGERATE THIS YEAR'S GAIN.

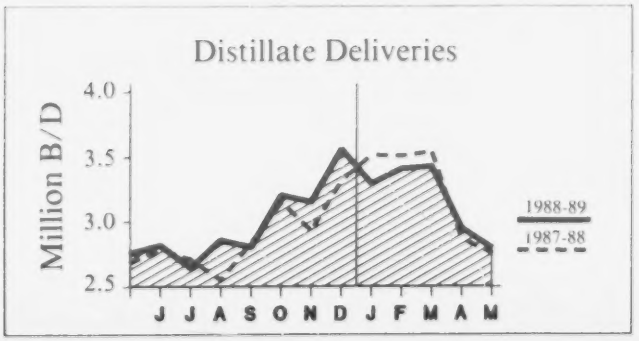
Deliveries of residual fuel oil are estimated to have been 1,324 thousand B/D in May, representing a decline of 8.5 percent from April but an increase of 40.1 percent from the previous year. The month-to-month decline is similar to the seasonal average. Most of the substantial year-to-year increase results from the record low level of deliveries recorded in May 1988. Consumption in 1989 so far is increasing at an estimated 5 to 7 percent, somewhat less than the year-to-date increase in deliveries.

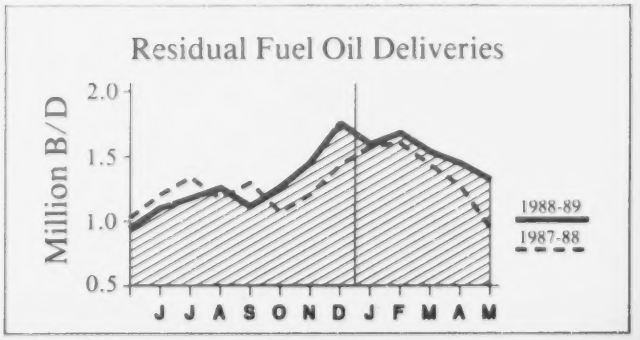
Deliveries to the electric utility sector, after adjustment for seasonal factors, are believed to have been strong. Continuing a pattern observed last month, utilities are reported to have increased their stocks, contributing substantially to the divergence between total deliveries and direct consumption. Several utilities, however, were believed to have increased their direct consumption as a result of above-trend electricity consumption in several parts of the country. In addition, occasional disruptions of natural gas supplies are also reported to have resulted in additional demand for heavy fuel oil.

Having displayed strength during the past several months, industrial markets are reported to have subsided as a result of









ample stocks and the availability of competitively priced natural gas. Domestic bunker fuel deliveries apparently continue to be weak, but activity is reported to have varied by region. East Coast markets are reported to be subdued as a result of more competitive prices in Rotterdam, while deliveries in the Gulf Coast are believed to have increased slightly, partly as a result of unintended increases in bunker fuel output arising from maintenance problems at certain refineries. Nonetheless, uncertainties about the direction of oil markets are believed to have restrained purchases of bunker fuel during the month.

Kerosine Jet Fuel

FLATTENING TRAFFIC SLOWS CONSUMPTION. Overall, growth in air traffic continues to be weak. In fact, in the last several months traffic has actually been running slightly behind levels of a year ago because of declines in domestic passenger travel related to strike activity and higher fares. Nevertheless, cargo traffic, as well as international passenger flights, have continued to be strong, with recent year-to-year gains running around 10 percent.

The slowdown in air traffic has been reflected in kerosine jet fuel deliveries. Although May's deliveries rose 3.7 percent, this was hardly enough to offset a particularly weak showing for April. For the year to date, deliveries have risen less than 1 percent, in line with air traffic data for a similar period.

Other Oils

DELIVERIES RISE 4.6 PERCENT. Deliveries of other oils were estimated to have been 4,061 thousand B/D, representing an increase of 3.8 percent from April as well as a 4.6 percent increase from last year. The month-to-month increase is consistent with seasonal patterns. Much of the year-to-year increase, however, resulted from low levels of deliveries last May rather than unusual strength in the current month.

Petrochemical deliveries are believed to have remained robust during the month, with most of the feedstocks reflecting that strength. Ethane deliveries, however, have apparently declined somewhat as a result of shifts in petrochemical plant economics, which are believed to have resulted in increased deliveries of other feedstocks, especially those at the heavier end.

Asphalt and road oil deliveries, however, are believed to have increased only slightly from last month's levels in contrast to the normal seasonal pattern. Wet weather in several parts of the country is believed to have been responsible for the lack of demand.

SUPPLY [1/]

Production

ALASKA CONTRIBUTES TO U.S. DECLINE. For the seventh month in a row, Alaska contributed to the U.S. production decline in May. Total domestic crude oil output fell 359 thousand B/D, year to year, with 43 thousand B/D of the decline occurring in Alaska. Although temporary restrictions stemming from the Valdez tanker accident were responsible for a dip in Alaskan production for a short period earlier this year, Alaskan declines otherwise have still been running 40 to 50 thousand B/D over the past half year or so.

This contrasts with the pattern of the previous decade. Since 1977, when the Prudhoe Bay field came on stream, Alaskan production had been increasing almost each year. From 1986, when lower 48 production began to sag as world oil prices slid, through last year, it was still adding 40 to 90 thousand B/D per year to domestic production. This provided at least some offset to the steady decline for the rest of the U.S. over the period.

Reduced production in the lower 48 still accounts for most of the domestic production decline, however. With May's drop in lower 48 production of 316 thousand B/D, the decline since early 1986 outside Alaska now amounts to about 1.4 million B/D or nearly 20 percent.

Imports

RISE CONTINUES. Imports were up 9 percent, or 650 thousand B/D, from one year earlier in May, dropping only slightly from April's recent-year high of 8 million B/D.

Product imports rose 165 thousand B/D, with distillate imports rising about 25 thousand B/D, residual fuel oil increasing about 90 thousand B/D from last May's below-trend levels, and kerosine jet fuel imports jumping nearly 50 thousand B/D. Imports of gasoline and components, though down about 60 thousand B/D from last May's level of over one-half million B/D, for the year to date are still ahead by about 35 thousand B/D.

World gasoline markets, in which the U.S. plays the role of a major importer, are being affected by many factors, including some similar to those occurring in the U.S. Lead phasedown and shifts to unleaded fuels are taking place in Europe and Canada, with recent retail tax incentives in such countries as the U.K. and France speeding the switch this year—and where unleaded fuels already have significant market shares, premium grades have been gaining increasing popularity.

In addition to the greater need for octane alternatives implied by these developments, demand in many areas has experienced healthy growth due to increased travel, or in the case of Brazil (a major source of U.S. gasoline imports), due to scaling back of that country's government-subsidized fuel alcohol program. Though refining capacity enhancements are being made in various parts of the world in response to these developments, indications are that there is now less slack in world gasoline markets than has been the case in the recent past.

Refinery Operations

INPUT MATCHES LAST MAY, GASOLINE OUTPUT RISES. Utilization of operable capacity rose to 86.8 percent in May, and on the basis of capacity in actual operation, exceeded 91 percent. This high rate is only slightly lower than the levels of last summer, when the refining industry stretched utilization of

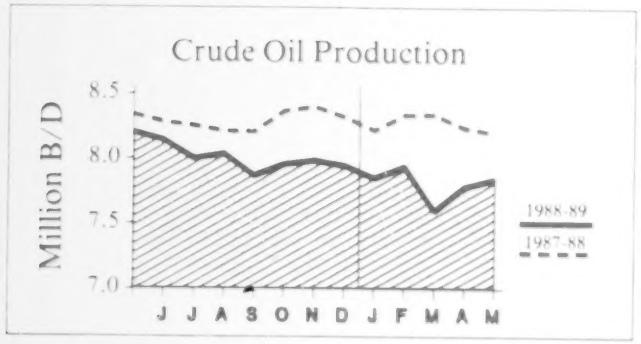
capacity in actual operation to around 93 percent. Though input to distillation units this May roughly matched that of a year ago, gasoline production rose 1.4 percent year to year.

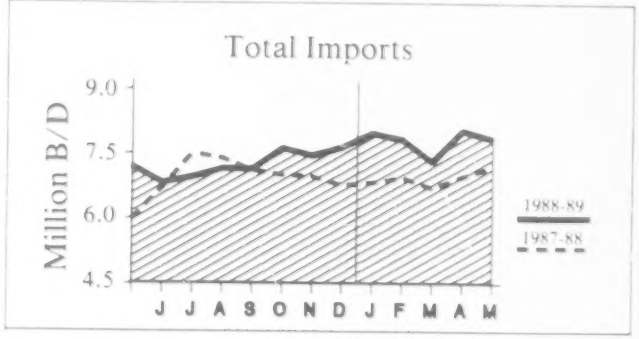
The increase in gasoline output came despite tighter vapor pressure regulations which have cut gasoline production capacity by roughly 100 thousand B/D for the summer months. Apparently, projects to enhance production capability and upgrade octane availability have enabled refiners to reduce the impact of this development to some extent.

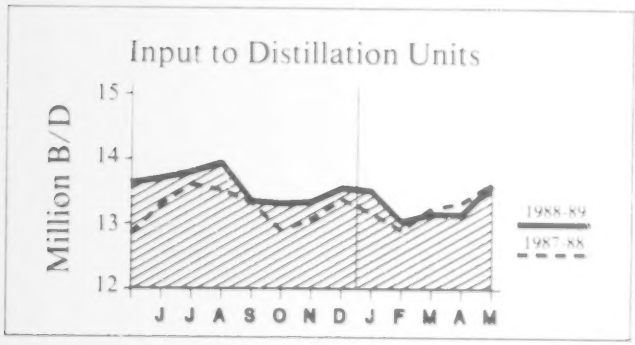
Distillate output dropped over 6 percent in May, while residual fuel oil output rose more than 10 percent.

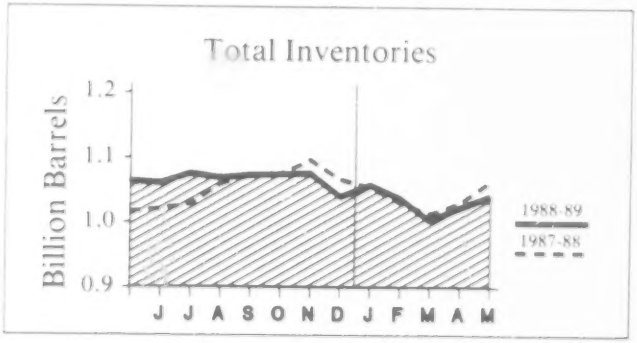
Inventories

STOCKS RISE IN LINE WITH AVERAGE. Total stocks rose 18 million barrels in May, similar to the average increase for the month in recent previous years. Gasoline stocks declined slightly, and at 220 million barrels, were within the 215 to 235 million barrel range for the month experienced in the previous four years. Distillate stocks, as well, remained near April's closing levels, rising slightly to 98 million barrels.









1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 570 million barrels as of May 31, 1989).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	MAY			YEAR-TO-DATE		
	1989[1]	1988[2]	% Change	1989[3R]	1988[2]	% Change
Products Supplied						
Total motor gasoline	7,415	7,269	2.0	7,221	7,120	1.4
Finished leaded motor gasoline*	950	1,456	(34.8)	973	1,406	(30.8)
Finished unleaded motor gasoline*	6,465	5,813	11.2	6,248	5,714	9.3
Naphtha-jet	212	208	1.9	200	207	(3.4)
Kerosine-jet	1,196	1,153	3.7	1,241	1,230	0.9
Distillate fuel oil	2,798	2,757	1.5	3,174	3,239	(2.0)
Residual fuel oil	1,324	945	40.1	1,514	1,364	11.0
All other oils[4]	4,061	3,881	4.6	4,140	4,011	3.2
Reclassified[5]	- 136	- 96	41.7	- 165	- 195	(15.4)
Total domestic products supplied	16,870	16,117	4.7	17,325	16,976	2.1
Exports	867	817	6.1	834	819	1.8
Total products supplied	17,737	16,934	4.7	18,159 r	17,795	2.0
Supply						
Domestic production						
Crude oil[6]	7,841	8,200	(4.4)	7,818	8,264	(5.4)
Natural gas liquids	1,648	1,624	1.5	1,636	1,605	1.9
Other supply[7]	988	982	0.6	917	974	(5.9)
Total domestic supply	10,477	10,806	(3.0)	10,371	10,843	(4.4)
Imports	10/	10/		10/	10/	
Crude oil, total	5,698	5,213	9.3	5,398	4,846	11.4
Canadian	657	705	(6.8)	633	677	(6.5)
Other	5,041	4,508	11.8	4,765	4,169	14.3
Products, total	2,148	1,983	8.3	2,399	2,084	15.1
Residual fuel oil	514	423	21.5	716	604	18.5
Other	1,634	1,560	4.7	1,683	1,480	13.7
Total imports	7,846	7,196	9.0	7,797	6,930	12.5
Total supply	18,323	18,002	1.8	18,168	17,773	2.2
Stock change, all oils	+ 586	+1,068	XXXX	+ 9	- 22	XXXX
Refinery Operations						
Input to crude oil distillation units	13,609	13,630	(0.2)	13,295	13,260	0.3
Operable capacity	15,674	15,883	(1.3)	15,725	15,886	(1.0)
Refinery utilization (%)[8]	86.8%	85.8%	1.2	84.5%	83.5%	1.2
Crude oil runs	13,481	13,472	0.1	13,124	13,084	0.3

Stocks (millions bbls.)	1989		1988[2]	% Change from	
	May 31[9]	Apr. 30[9]	May 31	Previous Month	Year Ago
Crude oil 10/	344.4	339.6r/	357.7	1.4	(3.7)
Unfinished oils	115.0	111.2r/	112.1	3.4	2.6
Total motor gasoline**	220.1	222.7r/	225.6	(1.2)	(2.4)
Finished leaded motor gasoline*	26.0	28.9r/	45.1	(10.0)	(42.4)
Finished unleaded motor gasoline*	154.2	154.9r/	143.3	(0.5)	7.6
Naphtha-jet	6.0	5.9r/	7.4	1.7	(18.9)
Kerosine-jet	39.0	38.4r/	39.4	1.6	(1.0)
Distillate fuel oil	98.3	96.0r/	104.5	2.4	(5.9)
Residual fuel oil	39.6	40.8r/	45.7	(2.9)	(13.3)
All other oils	179.0	168.7r/	171.3	6.1	4.5
Total all oils	1,041.4	1,023.3r/	1,063.7	1.8	(2.1)

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-March, U.S. Department of Energy, April-May, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.